

Appl. No. : 08/834,194
Filed : April 14, 1997

5 a signal processor operatively coupled to said detector, said signal
6 processor receiving said detector output waveform, said signal processor
7 configured to:

8 transform said detector output waveform into a spectral
9 domain waveform;

10 identify a series of spectral peaks and peak frequencies
11 corresponding to said spectral peaks in said spectral domain
12 waveform; and

13 apply a plurality of rules to said spectral peaks and said peak
14 frequencies in order to determine an estimate for said pulserate.

A1
B 1 ~~4~~ 18. (Amended) A physiological monitor ^{adapted to be} attached to a living organism,
2 said organism [comprising] having a heart beating at an unknown pulserate, said
3 monitor comprising:

4 a detector responsive to physiological properties relating to said
5 heartbeats, said detector producing a detector output waveform; and

6 a signal processor operatively coupled to said detector, said signal
7 processor receiving said detector output waveform, said signal processor
8 configured to:

9 perform a first transform to transform said detector output
10 waveform into a waveform in a first transform domain;

A2
11 perform a second transform, to transform said waveform in
12 said first transform domain into a waveform in a second transform
13 domain;

14 search said waveform in said second transform domain for a
15 largest spectral peak and a first frequency corresponding to said
16 largest spectral peak; and

17 compute an estimate of said unknown pulserate from said
18 first frequency.

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1 ~~29.~~ (Amended) The physiological monitor of Claim 28, wherein said
2 signal processor is further configured to:

3 search said waveform in said first transform domain for a highest
4 spectral peak and a second frequency corresponding to said highest spectral
5 peak; and

6 compute said estimate of said unknown pulserate from said second
7 frequency if said first frequency is above a threshold [frequency] frequency.

A3
1 ~~30.~~ (Amended) In a physiological monitor attached to a living
2 organism, said organism [comprising] having a heart beating at an unknown
3 pulserate, said monitor having a detector responsive to physiological properties
4 relating to said heartbeats, said detector producing a detector output waveform, a
5 method comprising the steps of:

6 performing a first transform to transform said detector output
7 waveform into a waveform in a first transform domain;

8 performing a second transform, to transform said waveform in said
9 first transform domain into a waveform in a second transform domain;

10 searching said waveform in said second transform domain for a
11 largest spectral peak and a first frequency corresponding to said largest
12 spectral peak; and

13 computing an estimate of said unknown pulserate from said first
14 frequency.

REMARKS

[In response to the June 10, 1998 Office Action, Applicants respectfully request the Examiner to reconsider the above-captioned application in view of the foregoing amendments and the following comments.